Some cues about the interactional value of the "continuation" contour in French

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Summary: The aim of this study is to provide some evidence in favour of our claim that the rising contour called "continuation" contour in French intonation has a true dialogical function, showing the strong relationship between this contour and conversational strategic points. The "continuation" contour is often mentioned as part of the basic system of French intonation (Delattre 1966, Rossi 1999 for instance). However, its structural role is generally highlighted to the detriment of its interactional role. For instance, Marandin et al. 2004 proposed a model of French intonational contours in which the "non-final" contour has no "discourse function", the latter being defined as a dialogical function. Moreover, E. Delais-Roussarie proposes to consider the continuation movement as a default melodic movement and hence to remove it from the intonational system (Delais-Roussarie 2005). If we agree with this position concerning the "minor continuation" (Delattre, Rossi) we bring here some pieces of evidence to the opposite claim concerning the "major continuation contour". We show that this contour occurs very frequently at TRPs (Transition Relevance Places) and also co-occurs with vocal and gestural backchannel signals as defined by Conversational Analysis.

1. Introduction

The issue of the meaning of prosody, especially intonation, is of crucial importance at the interface of prosody with discourse. It is true not only because prosody is well known to convey emotion and attitude in language, not only because it highly contributes to discourse structure (see for instance the notion of *period* : Berrendonner 1990, Brown & Yule 1983) but more importantly because prosodic constructions, especially intonational tune, have been shown to take their meaning in the relationship between the speaker and his interlocutors, i.e. its functioning can not be understood without taking dialogue into account (Gussenhoven 1983, Hirschberg&Ward 1995, Marandin & al. 2004).

Adopting this last view, this paper aims to give first cues in favour of an interactional interpretation of the *continuation rise* although this tune, as its name suggests, is described most of the times as a structural one.

The present study uses the framework of conversation analysis (henceforth CA), in which numerous works claim that prosodic cues constitute, among others, a resource that participants draw upon to accomplish a range of fundamental interactional tasks (Couper-Kuhlen & Selting, 1996). We will show that the continuation contour in its *major* version occurs frequently with strategic potential positions for turn taking. Continuation contours may thus be one of the cues which allow the speaker to project and the recipient to predict possible completion and transition turns.

2. Theoretical background

The point of this paper comes from a disagreement relative to an aspect of Marandin and colleagues' model of French intonational meaning, though we adopt this model in its general form as our framework. In this section, the model is first exposed; we then define the notion of continuation contour before formulating our working hypothesis. We then expose and define the notions and methods we take from conversational analysis in order to sustain our claim.

2.1 Modeling "the meaning of final contours in French" : Marandin & colleagues (2004)

The question of meaning or *function* is present in the early taxonomies of intonational contours (see for instance Bolinger 1989 for the British tradition, or Delattre 1966 for French). Delattre (1966, 1969) and Rossi (1981) have conceived the elements of French intonational system as intonational morphemes called *intonèmes* : they define each tune as a contrastive F0 movement related to a specific function. For instance, Delattre defines a *finality* contour which has a falling movement and signals the end of the utterance. The model proposed by Marandin & colleagues (2004), conceives intonational contours not exactly as morphemes, but rather as constructions (see Marandin 2004) as defined in the Construction Grammar framework (Goldberg 1995). In Marandin's model where French intonational tunes are presented in a hierarchically structured nomenclature (see figure 1) the main problem of the morphemic approach, namely the heterogeneity of the functional definitions (some are structural (continuation, finality) while others are modal (interrogation, question, command) or psychological (implication)), is avoided.

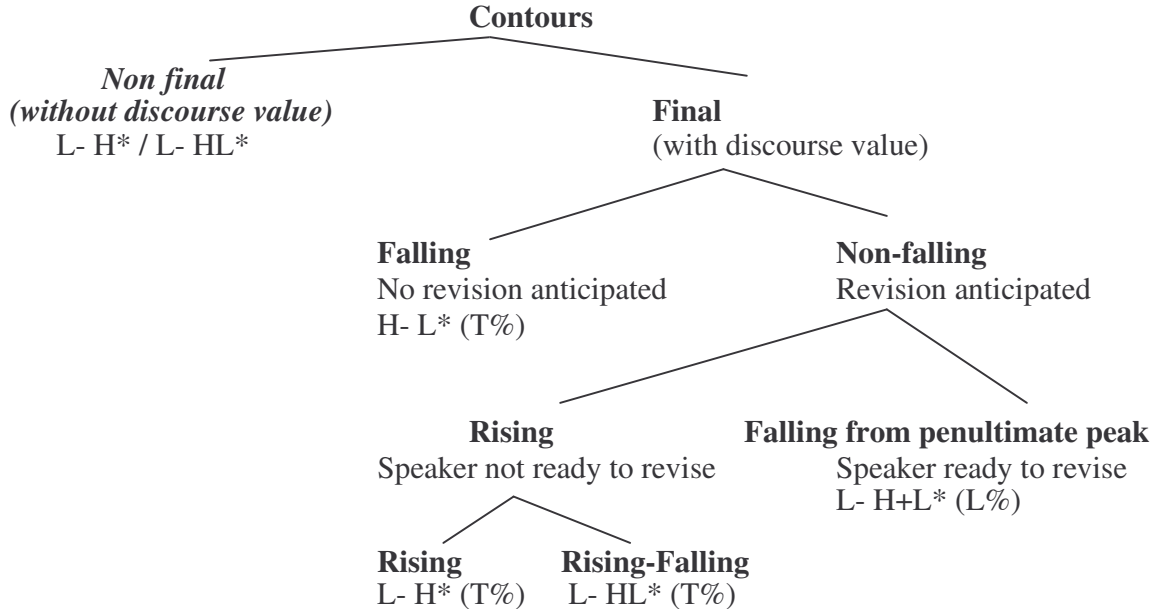

Figure 1 : The semantics of French intonation according to Marandin et al. (2004). Italics signals the point discussed in this paper : the absence of discourse value of non final F0 movements, i.e. Delattre's *continuation* contour.

A crucial point is that Marandin and colleagues' nomenclature is based on semantic criteria. Usually, in the autosegmental-metrical framework adopted by these authors, contrastive contours are identified through their formal properties, namely their tonal composition (Pierrehumbert 1980, Ladd 1996). Thus recent autosegmental models of French intonation include almost no mention to

intonational meaning (Post 2000, Jun & Fougeron 2000). We follow Marandin et al. in assuming that meaning is a crucial dimension to define contrastive intonational tunes since conveying meaning is the vocation of any linguistic construction.

This does not mean that intonational meaning has never been discussed in the autosegmental-metrical framework (among other work: Gussenhoven 1983, Pierrehumbert & Hirschberg 1990, Steedman 2003). These studies have in common that they relate intonational meaning to information structure: the intonational contour or its parts signals the informational status of the content of the utterance. As in Bolinger's work or in Rossi's *grammar of pragmatic intonation*, the reference to the recipient of the message is implicit, for instance, in the idea of adding the content of the utterance to the common ground , for instance through a *falling* contour in English and in French. Marandin and colleagues' model underlines the dialogical nature of intonational meaning. Leaning upon Ginzburg's model of dialog (Ginzburg to appear) they propose that French contours signal which kind of reception the speaker anticipates for his utterance. The specific anticipation related to a contour is formulated under the name of each contour in Figure 1. We will not discuss here what concerns *final* contours. We will focus on *non final* contours often called *continuation* contours in the French prosodic literature.

2.2 Continuation contour

Both Delattre (1966) and Rossi (1981) distinguish two different continuation contours: a *minor* and a *major* continuation (see below for more details). Roughly, both are rising movements up to a different pitch range (higher for major continuation, lower for minor continuation); functionally, the major continuation is used to group several minor continuations in a bigger unit "which is not the end of the sentence" (Delattre 1966). Figure 2 gives an example of both tunes and their relationship.

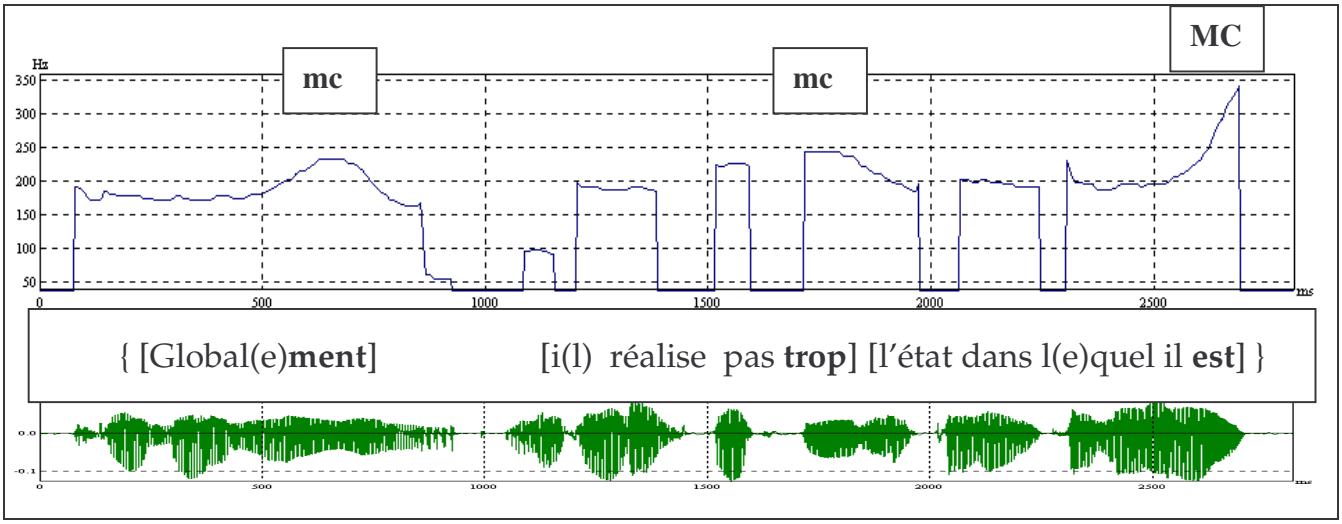

Figure 2 : Example of a major continuation rise (MC) including two minor continuation rises (mc). Taken from the CID corpus

Rossi's view is more complex since he also defines a topical continuative which marks the topic of the sentence in his *grammar of pragmatic intonation* (Rossi 1999).

It is generally admitted by authors working on French intonation that *minor* continuation contours, although often rising, may present falling F0 movements. This allophony is said to be

governed essentially by metrical and syntactical constraints (see the concept of *slope inversion*, Martin 1981)

Marandin and colleagues do not maintain the distinction between minor and major *non final* contours; however, they keep the allophonic variation between rising (L- H*) and falling (L- HL*) non-final movements. More crucially, the model states that non-final contours have **no discourse value** (as one can note in Figure 1). Moreover, Delais-Roussarie, one of the co-authors, goes beyond this position by removing the non final F0 movement from the inventory of French intonational contours (Delais-Roussarie 2005). She claims that what Marandin et al. 2004 still treat as non final *contours* are only some kind of **default** F0 movements, which are entirely constrained by metrical and syntactical factors.

2.3 Working hypothesis

We disagree with the claim of Marandin et al.'s model that non-final contours have *no discourse value*, nor with Delais-Roussarie's strong claim that they are *default* F0 movements. Our claim implies that a distinction between minor and major continuation be recognized. In fact, we propose that minor continuation is considered as a *default* F0 movement as in Delais-Roussarie 2005. However, we claim that the major continuation contour has a true discursive value which should also be defined in *dialogical* terms.

This claim is theoretically supported by Ginzburg's own proposal (Ginzburg, to appear, cited by E. Engdahl 2005) which is paradoxically the model founding Marandin's et al. approach. Ginzburg proposes that continuation intonation associated with the end of a sentence produces the removal of the Question Under Discussion (QUD) related to this sentence, and its inscription in the shared knowledge (Facts), but only if there is no interruption from the addressee or if the utterance is punctuated by a backchannel.

Section 3 and 4 above aim to show that major continuation has effectively an interactional (dialogical) function, while minor continuation clearly does not have such function (or it shows it in a minor way). To do so we will use concepts and methods borrowed from Conversational Analysis.

2.4 The *Conversational Analysis* framework

2.4.1. Mechanism for the organization of turn-taking

Since the famous paper of Sacks et al (1974), we know that there is a system of turn-taking which explains why and how smooth-transition turns (avoiding gaps and overlaps) can be achieved.

The framework of *Conversational Analysis* (henceforth CA) then offers concepts and tools to account for natural conversational data. The authors proposed a mechanism for the organization of turn-taking which relies on two components: a turn-*constructional component* (construction of unit) and a *turn-allocation component* (regulation and negotiation of turn allocation):

Turns can be constructed from *turn-constructional units* (TCU):

[…] smooth turn-taking in conversation is based on participants' recognition of certain stretches of talk as 'turn-constructional units', the completeness of which occasions the possibility of turn-transition (Auer, 1996: 57)

These points of possible unit completion make turn transition relevant but not necessary:

*[…]on their (TCUs) possible completion, transition to a next speaker becomes relevant (although not necessarily accomplished) (*Schegloff, 1996: 55)

These points of completion are called *transition relevance place* (TRP).

Different resources are available to participants of talk in interaction to regulate and manage turn-taking. Numerous studies dealing with the question of the nature of TCUs showed that these latter are not only syntactic units but complex units involving different factors such as syntactic, semantic, pragmatic, prosodic or gestural (Ford and Thompson, 1996; Selting, 1998 among others).

TCUs and turns are the results of the interplay of syntax and prosody in the given semantic, discourse- pragmatic and sequential context (Selting, 1998: 38).

Among these resources, prosody plays a crucial role. Indeed, much previous research showed that intonation plays a primary role in the construction of unit and in projecting points of completion in interactional speech data (Ford and Thompson, 1996; Wells and MacFarlane, 1998; Fox, 2001; Couper-Kuhlen and Ford, 2004).

The present work assumes a double interest: one for the intonational perspective and another for the conversational perspective. It raises indeed the question of finality which is crucial for both perspectives. We do not come back to the intonational perspective (see above). From the CA perspective, a TCU is potentially completed when it is at least syntactically and prosodically completed, i.e *final*. The majority of authors, by convenience and because it is not the point, only consider **final** contours to account for turn-taking. However, as we will see here, finality is not such a clear notion. Even in English, in which we found much more work in this perspective, Szczepek Reed (2004) demonstrated that the notion of finality in English through different types of "turn final intonation" is not yet completely known. She showed that it exists other pitch movements (beyond the only two very specific pitch movements usually described: the "fall-to-low" and the "high rise") which can be found at turn-endings. In the same sense, the present study draws into question the notion of continuation contour in French and its more global role in turn-taking.

2.4.2. Definitions adopted in this paper

For Selting (1998), TCUs are "the smallest interactionally relevant complete linguistic unit" (1998: 40).

This means that a TCU is **necessarily** syntactically and prosodically complete; but these two criteria are not **sufficient** to make a TCU. Moreover, a TCU must be pragmatically complete (see Ford and Thompson, 1996, and Selting for more details about pragmatic criterion).

*A turn is considered to have ended when a syntactic gestalt (Auer, 1996), with either a low or a high rise in pitch at its end and a social action are completed (*Szczepek Reed, 2004).

Yet following Selting (1998), we then distinguish between non-final TCU (TCU_nf) on the one hand and final TCU (TCU_f) which end in a TRP (transition-relevance place) on the other hand. The latter is then a single unit turn while non-final TCUs (incomplete for semantic, pragmatic or sequential reasons) are components of larger turns that constitute activities (for instance causal constructions, a larger project such as story telling).

Hence, linguistic and interactional resources are used to project and postpone TRPs until the end of larger turns. Each TRP then occurs in a point of potential achievement built from these different linguistic criteria which are also used by recipients as predictable cues. Each TRP must be indeed predictable to the listener/recipient to allow for smooth transition.

2.4.3. Back-channel signals (BCs henceforth)

In spontaneous dialogue, *backchannel signals* (such as "mhm", "ouais", "OK", etc.) also called *continuers* (Schegloff, 1982), are short utterances produced by the recipient/listener to signal sustained attention to the speaker while this latter is talking. By regulating exchanges, they preserve the relation between the interlocutors which mutually give signs of their presence and interest.

BCs also play a major role in conversation because they contribute, by orienting in one or another way, to the co-construction of discourse and interaction.

More globally, account for BC in dialogue lead us to analyze the collaborative work of all the participants in the elaboration and the exchange of sense and discourse. Through their different functions of acknowledgment, support, attitude statement and relance (Laforest, 1992), they provide information on interlocutor's listening but also comprehension processes of discourse. Otherwise they provide information on speaker's discourse elaboration processes, in highlighting some steps in the elaboration of discourse for example.

In the CA framework, BC signals are considered as a minimal but real TCU. When they occur separately, we assume here that they constitute a real turn, even if they do not interrupt, nor interfere with the turn in progress.

BCs can also be produced by gestural means (head-shaking, smiles). Also it is much less easy to consider these gestural BCs as "real turns", they nevertheless function as real interactional signals, expected and potentially taken into account by speakers.

3. Methodology

3.1 Corpus

We analyse a ten-minute sample from the CID (Corpus of dialogal interactions). In this corpus, a discussion topic related to professionnal conflicts narration was provided to pairs of interlocutors. Their discussion was recorded in an anechoic room on two separate channels and visually shot.

The sample under study concerns two female speakers.

G.A.R.S. (Blanche-Benveniste et al., 1987) conventions have been used for the orthographic transcription.

3.2 Labelling

We labelled the corpus in order to be able to compare the relative occurrence of intonational contours on the one hand and conversational events on the other hand. It is important to underline that the intonational labelling and the conversational labelling had been performed independently by two different labellers. Only the identification of the prosodic domains (RG and IP : see section 3.2.1. below) has been established upon a consensus.

3.2.1 Intonational labelling

We assume that French prosody distinguishes at least two constituency domains. The lower one is the domain of the primary accent. It corresponds roughly to the "accentual phrase" described by Jun & Fougeron (2000, 2001) but also to the "intonation group" (Mertens 1993), the "phonological phrase" Post (2000) or the "rhythmic group" (RG) proposed by Delais-Roussarie (1995). We temporarily adopt this last designation as better corresponding to our definition. By default, this is also the domain of minor continuation.

The domain of major continuation and of the final contours is the *intonational phrase* (IP), which is higher in the prosodic hierarchy. It is also used by Jun & Fougeron (2000, 2001) and Post (2000), and corresponds to Vaissière's "Breath group" (Vaissière 1997) and to Hirst & Di Cristo's "Intonational Unit" (Di Cristo 1998).

Hence one of the authors added intonational labels after the right boundary of each prosodic domain using the orthographic transcription of the corpus. The contour identification was made auditorily, listening to the sound file corresponding to the extract chosen. The inventory of intonational contours identified is the one proposed by Marandin and colleagues (2004), plus the distinction between minor and major continuation, plus the label PAR which identifies any verbal segment realized with a flat intonation (such intonational patterns are found for instance on segments localised in post focus position). The labels and their definition are given by Table 1 below.

Label	**Name of the contour**
mc	minor continuation
MC	Major continuation
F	Falling contour
R	Rising contour
RF1	Rising-falling contour
RF2	Falling from the penultimate peak
PAR	Flat intonation

Table 1 : Intonational labels (left column) and the corresponding contour or F0 movement (right column)

This first task of labelling has pointed to the attention of the labeller an audible phonetic difference between the usual MC and a contour used during enumeration. We then decided to realize a second identification task to distinguish those two tunes, labelling ENUM the enumeration one.

3.2.2 Conversational labelling

The other expert labelled the orthographic transcription of the corpus, adding non final TCU and final TCU labels at relevant IP boundaries, without knowing about contour identification realized by the other expert to avoid circularity.

The occurrence of vocal (**mmum, ouais,** and so on) and gestural (**BCG**) back-channels signals was also labelled.

3.3 Testing the hypothesis

To show the interactional function of MC versus mc, we look at their possible role in constructing TCUs (non final or final) and in projecting the end of a turn (final TCUs).

We look at the co-occurrence of the different contour types with TCUs and BCs, the latter being the main explicit sign of the addressee's conversational activity (at least in this type of corpus).

4. Results

Table 2 shows the percentage of each contour type co-occuring with the different conversational events, namely non final TCUs (TCU_nf), final TCUs (TCU_f), both type of TCUs and BCs at the same time (TCU + BCs) and BCs not associated to TCUs (isolated BC). TCU+BC should be examined separately because the co-occurrence of both events reinforces the interactional value of the boundary concerned.

	Non final contours			Final contours				
	mc	MC	ENUM	F	R	RF1	RF2	PAR
Total of each contour type	300	131	22	43	33	37	8	16
% no co-occurrence	88.4	18.4	0	7	6,3	13,5	0	18,8
% TCU_nf	0	37.4	82	18.6	15	27	12.5	0
% TCU_f	0	42.7	18	74.4	78.7	67.5	87.5	81.2
% TCU + BC	0	30.5	41	41.8	36.3	40.5	50	50
% isolated BC	11.6	1.5	0	0	0	0	0	0

Table 2 : Percentages of each contour type co-occuring with TCUs and BCs

It is not surprising to observe that there is no co-occurrence of TCU with mc contour since by definition TCU (f or nf) cannot be achieved at the end of a RG which is not IPfinal. The small amount of BCs associated to mc (11,6%) function as relance (when disfluencies) more than as acknowledgement or support. This is illustrated by the example 1[1] where N is producing several minor

[1] Transcription conventions:
: segmental lengthening, according to duration
xxx: speech overlap
XXX: incomprehensive syllable
mhm: monosyllabic BC
mhm mhm: disyllabic BC
…- start false

continuations with filled pauses, lengthening, and repetitions following by a BC (line 2) from L which is an encouragement to N in continuing:

(1)	1	N	et : (mc) c'est vrai (mc) que les les les héritages : (mc) c'est source de : (mc)
→	2	L	mhm[110]
	3	N	hein (R)
	4	L	de gros conflits

More interestingly, 18,4% of the MC co-occur neither with a TCU nor with a BC. But most of them are not of the same kind than the "interactional" ones : they are often isolated adverbs or expressions that introduce a change in the discourse activity or the beginning of a new turn (see example 2, line 9). Here MC is used for its well known structural function.

(2)	1	N	fin çà dépend aussi (mc) des relations (mc)
	2	N	que t'as avec ton frère (mc)
	3	N	ou ta sœur (mc)
	4	L	ouais[115]
	5	N	au pendant (MD1) TCU_nf46
	6	L	ouais[116]
	7	N	je veux dire (mc) avant (mc) tous ces ces trucs là (MD1) TCU_f113
	8	N	tu vois (Q) (TCU_f114)
→	9	L	mais euh tu vois (MC)
	10	L	françoise (mc) me me disait (mc) que elle (M)
	11	L	c'est ce qui s'est passé (MC) (TCU_nf47)
	12	L	autour de l'hé- : du la m- enfin (mc) quand ses parents (mc)
	13	L	sont morts (MC) TCU_nf48

On the other hand, the 79,6% which co-occur with a conversational event show the true interactional function of MC. It is important to note that co-occurrence of MC with **final** TCUs is at least as frequent as with non final TCUs (42,7% versus 36,4%). Co-occurrence with BCs is also much more important for MC than for mc (32% versus 11,5%). MC actually associates with a similar number of BCs than *final* contours (around 40%). The example 3 shows the co-occurrence of MC with a final TCU and a BC: in the first case (line 2), BC occurs in speech overlap because of the "expansion" (see the recent work on increments, add-on, completions of turn, Walker, 2004) of N turn; in the second case (line 5) MC occurs in the end of N turn and also co-occurs with a BC.

(3)	1	N	et ma mère (mc)
→	2	N	elle est là au milieu (MC) (TCU_f 21)
	3	**N**	avec moi j'ai un père (mc)
	4	L	mhm mhm[17]
→	5	N	qui a quelques soucis de santé (MC) (TCU_f 22)
	6	L	mhm[18]

As expected, final contours co-occur for around 80% with TCU_f (except for RF1). However, more surprisingly, table 2 also shows their co-occurrence with TCU_nf for around 20% : hence the difference between *final* and *non final* is not so clear than it often appears. In example 4, we show several occurrence of final falling contour (D) which end in TCU_nf (line 3, line 7). These falling contours are considered as non final TCU because they belong to a larger project of story telling (see section 2.4.2), or because they belong to a typical construction (line 14) such as "when-then ("quand" line 1 up to "donc" line 16). Only the falling contour (line 18) ends in a turn.

(4)	1	N	quand t- euh: quand les parents (mc) de mon père (mc)
	2	N	sont décédés (MC) TCU_nf57
→	3	N	euh : à dix huit mois (mc) d'intervalle (D) TCU_nf58 eh (Q) TCU_nf59
	4	N	les deux sont partis (MC) TCU_nf60
	5	L	BCG[134]
	6	N	et il y a de çà (mc) euh deux trois ans (mc)

→	7	N	maintenant (D) TCU_nf61
	8	N	eh bien (mc) donc (mc)
	9	N	euh: quand le : quand le premier est parti (MC) TCU_nf62
	10	N	donc c'était mon grand-père (MC) TCU_nf63
	11	N	lui (mc)
	12	N	il avait toute sa tête (MC) TCU_nf64
	13	N	et celle (mc) qu'il a laissée derrière (MC) TCU_nf65
→	14	N	elle avait plus sa tête (D) TCU_nf64
	15	L	mhm mhm[135]
	16	N	donc çà veut dire (mc) qu'il a fallu (mc)
	17	L	ah [XXX]
→	18	N	un tuteur (D) TCU_f134

Final contours also count some items which does not associate with any conversational event (neither TCU nor BCs) : 7% for F, 6,3% for R, 16,3% for RF1. This too shows that the function of *final* contours may also be more structural than interactional.

Concerning ENUM, it appears to be a very specific kind of *non final* contour, different from usual *continuation*. Following Selting (1998) it achieves in a non final TCU (82% in our results) in projecting a continuation from the same speaker. Rare cases of TCU_f refer to the last term of the enumeration (ending in a TRP).

	Non final contours			Final contours				
	mc	MC	ENUM	F	R	RF1	RF2	PAR
total of BC for each contour	35	42	9	18	12	15	4	8
% BC_isolated	100	4,8	0	0	0	0	0	0
% BC + TCU_nf	0	24,1	89	11,1	8	26,7	0	0
% BC + TCU_f	0	72	11	88,9	92	73,3	100	100

Table 3 : Percentage of each contour type co-occuring with back-channels

Table 3 shows that for MC as well as for *final* contours (F, R, RF1 and RF2), BCs associate much more frequently with final TCUs than with non final TCUs (72% versus 24,1%). Only ENUM exhibit the reverse pattern, due to its defining specificity (see above).

	Non final contours			Final contours				
	mc	MC	ENUM	F	R	RF1	RF2	PAR
total of BC for each contour	35	42	9	18	12	15	4	8
% BCvoc	62,9	62,4	67	77,8	83	80	75	75
% BCg	37,1	37,6	33	22,2	17	20	25	25

Table 4 : Percentage of each contour type co-occuring with the two types of back-channels (vocal BC and gestural BC)

Table 4 shows a surprising homogeneity in the relative distribution of each type of BCs following contour types : roughly 70% of vocal BCs versus 30% of gestural BCs. These results also display a small difference between final and non final contours : for non final ones, the proportion of BCg is a little bit greater than for final ones. However, this last observation should be verified on larger data.

5. Discussion

Continuation intonation in French is most of the time described in its structural function. Moreover in recent autosegmental accounts of French intonation, the difference between minor and major continuation has been abandoned. Some authors even consider continuatives as default F0 movements entirely constraint by syntactical and metrical criteria. Our results show how important it is to reintroduce the minor/major dichotomy, showing that major continuation has a clear dialogical/interactional role which renders it a full-fledged contour, with a true "discourse value", while minor continuation does not show the same function.

Not only does minor continuation (mc) never co-occur with a turn-constructional-unit (TCU) but it also associates only for 11,6% with backchannel signals (BC) versus 32% for major continuation. Moreover, these BCs don't play their usual role of continuer or assessment (Schegloff) but rather display a specific function (relance, encouragement) related to dysfluencies (such as hesitations, repairs, etc.) in the current speaker's discourse.

On the other hand, major continuation (MC) exhibits only 18,4% of occurrences no related to conversational events (neither TCUs nor BCs). We noticed that these items illustrate the structural function of MC. This is quite a small proportion for the so called main function of continuation.

The previous result also means that almost 80% of MCs associates with conversational events. More precisely MC relates for 36,4% with non final TCUs and for 42,7% with what Conversational Analysis defines as turns (**final** TCUs). Furthermore, 72% of BCs co-occuring with MC, associate with such a final TCU. We also find a greater number of BCs for MC than for mc (32% versus 11,6%).

These results strengthen our assumption concerning the interactive value of this pattern. They also highlight the importance of keeping the distinction between minor and major continuation initially proposed by Delattre et Rossi, which goes against the lack thereof in recent autosegmental accounts of French intonation.

The conversational treatment of enumeration (Selting, 1998) is in line with the distinction we made between ENUM and MC on the basis of their phonetic differences. We would hypothesize that enumeration should be the intonational "cliché" corresponding to major continuation in the dual taxonomy (each "normal" contour having its "cliché" version/counterpart) proposed by Marandin (2004). Further research about phonetic and functional differences between possible types of "non final" contours is needed.

Our results also bring to light the fact that MC shows an intermediate behaviour between mc and final contours, nevertheless closer from the latters. For instance, MC associates for 42% with final TCUs while it is around 75% for final contours. On the other hand, final contours do not show a strict association with conversational events since they occur alone for around 10%. More surprisingly, they can co-occur with non final TCUs for almost 20% of the items. These points highlight the difficulties raised by the notion of *finality* which is yet of crucial importance to define the units of the analysis (contours as well as conversational units).

Formulating the meaning of MC in the framework proposed by Marandin et al. (2004) also refers to these questions. We have seen in section 2.3. that, following Ginzburg (to appear, cited by E. Engdahl 2005), utterances intonationaly shaped with MC, if there is no interruption from the addressee or if the utterance is punctuated by a backchannel, produce the removal of the Question Under Discussion (QUD) related to this sentence, and its inscription in the shared knowledge (Facts). This is

also what happens when an utterance associates with the falling final contour (F) after any sign of acceptance of the utterance by the addressee (positive response, backchannel signal, approving silence). Hence, the discourse value proposed by Marandin and colleagues' model for F, namely *no revision anticipated* (on the part of the addressee) could also suits MC. If we are right, it is necessary to reformulate the discourse value of not only MC but also F, taking their differences into account.

The precise formulation of these discourse values is beyond the scope of this paper. Nevertheless we can already offer some details about the remaining functional difference between MC and F. MC is used to inform the addressee that the content of the next utterance is to be understood related to the current one (also recalled through the function of *linkage* of continuation contour, see Chafe 1988; Matsumoto, 2003) On the contrary, the choice of the F contour does not constraint the interpretation of the next utterance. This leads us to postulate at least two levels of *finality* : the strongest (Falling intonation) integrating the weakest (Major Continuation).

A larger study including the case of turn final major continuation contours when the next turn is an assertion or a question (not a BC or an isolated mark of agreement), as well as the case of final contours occurring into a turn (with no association with conversational events) will provide more information to further understand the real value of MC versus final contours.

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